

NEWSLETTER OF THE Z88 USERS' CLUB

JULY/AUGUST 1988

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THE CLUB ADDRESS

Any articles for Z88 EPROM or any other correspondence should be sent to:

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NG10 4NG

Always include your Membership Number with any correspondence. This is printed on the address label of each issue of Z88 EPROM.

EDITORIAL

This issue Z88 EPROM is a bigger (and I hope, better!) magazine - 36 pages - with both more editorial and advertising than ever before.

Please support the advertisers, as the money they pay for ads subsidises the printing costs of Z88 EPROM, and in the long term will keep down the cost of subscription. Also please mention the Club when replying to advertisements, to give the advertisers some feedback.

The 'big event' for Z88 users since the last issue has been the mailing of the official Z88 User Magazine, in June. Quite why it took Focus Magazines so long to distribute it I do not know - it was certainly printed in April. As those of you who have received a copy will know, the magazine is only available by subscription on joining the 'Z88 User Club'.

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As the name of the Focus organisation is so close to our own, and because I contributed to Z88 User magazine, there has inevitably been some confusion as to where it leaves this club, whether it has been absorbed by Focus, or whatever. I would therefore like to take this opportunity to present the facts leading up to Z88 User, and my involvement with Focus:

In November 1987 I was approached by Focus Magazines and asked if I would be interested in getting involved in the new magazine. At this stage it was agreed that I could write some articles for it on a freelance basis, and also that the Z88 Users' Club could have a page in the new magazine to present Club news, hints and tips etc.

In early February 1988 I was commissioned by Francis Jago, Editor of the new magazine, to write three articles - namely a review of Wordmongers Z-Term, a brief history of the Z88, and two pages of questions and answers that were to be presented as hints and tips. It was also confirmed that the club page article would be included.

In the event, when the magazine was printed, Focus used the three article I supplied (except that the questions and answers had turned into two pages of letters, not credited to me), but they omitted to include the Club page.

After I saw an early copy of the completed magazine, I was assured that this omission was an oversight, and the Club page would definitely appear in the second issue.

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It therefore came as a shock and surprise that when I recently had a copy sent to me in the general mailing, with the invitation to subscribe, it was via an organisation called 'The Z88 User Club', a name almost identical to the one this club has been using since September 1987. I obviously felt that I had been somewhat misled on this matter, as at no stage was this new 'club' mentioned to me. Shall we say that the people at Focus have been less than honest with me, and that had I known that this was their intention I would not have contributed to the new magazine.

I have since been in touch with Focus Magazines, who while apologetic have not really given me any reason why I was misled - they assumed that I had been told of the subscription arrangements. Focus told me that their new organisation is only a 'Club' in name, and it is basically being used as a vehicle to allow them to charge £25 for a subscription to the new magazine. They do not intend to provide any of the services of a User Group, such as those which the Z88 Users' Club provides.

On the basis of the above, I hope that any members will be assured that the Z88 Users' Club will continue in its present form, and that it remains the only organisation dedicated to support Z88 users which is completely independent. I would say that I am dismayed that Focus have taken this route, and I eagerly await the article in the second issue which I am assured will put the record straight. Apologies for taking so much space on this one subject, but I felt that it was important to put the record straight.

Following the announcement about the availability of Richard Russell's BASIC Patch in the last issue, I was inundated by over 100 EPROMs sent in by eager members! We now have another version of the PATCH - Richard Bignell of the Advisory Unit for Microtechnology in Education (pew! what a mouthfull!) has added a screen dump command, which will dump the contents of the graphics window to any Epson dot-matrix printer. Details on how to get this, and Richard's excellent graph drawing program, in the Software Library Update (p. 28)

Last issue there was a PipeDream application by Simon Phipps (0221) to allow you to mailmerge from within PipeDream. Unfortunately, due to an error on my part, the last section of the program was omitted. If you add the following to what was printed in the last issue you will find it does indeed work:

```
%V%%R%%LC%3
%V%%R%%LC%4
%V%%R%%LC%5
%CO:C,12,48%
+
+
+
%V%%R%%D0%if((B5=max(C6C15))|(D5<=0),1,C5+1)
%V%%R%%D0%1
%V%%R%%D0%2
%V%%R%%D0%3
%V%%R%%D0%4
%V%%R%%D0%5
%CO:D,12,36%
+
+
+
%V%%R%%D0%1
```


NEWSLINES

** CAMBRIDGE COMPUTER have signed a deal which will make the Z88 widely available in the United States. The contract - for an initial 13,000 units worth \$7.1 million - is with Diversified Foods Inc, the largest grocery wholesaler in the States. Diversified are setting up a new subsidiary, Sinclair Systems Inc., to market the Z88 range. Product shipments will begin immediately, with the computer still being made at SCI's plant at Irvine. It remains to be seen whether SCI might prefer to switch manufacture of the U.S. machines to one of its plants in the States.

** COLTON SOFTWARE, who wrote PipeDream as part of the Z88's inbuilt software, have recently released versions of PipeDream to run on the IBM PC or compatibles, and the Acorn Archimedes. Using PC PipeDream and PC Link II to link to your Z88, you are then able to pass PipeDream files between PC and Z88 and continue work on them with no modification. For more details see our Software Preview on page 28. Further details from Colton Software, Broadway House, 149-151 St Neots Road, Hardwick, Cambridge. CB3 7QJ. Tel: 0954 211472.

** THE EXPANSION bus port, under the cover below the RS232 on the right side of the machine, is being phased out of future production. CC say that this decision has been made to ensure reliability - something that could not be guaranteed if people were constantly plugging and unplugging peripherals onto the port. Part of the problem lies with the fact that even when the Z88 is switched

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'off', it is in fact only in standby, and plugging in peripherals could cause a crash. I feel sure that CC's decision was influenced by the fact that no peripherals have yet been developed which use the port. Peripherals such as disc drives or modems which might have used the expansion bus will work just as happily from the Z88's fast serial port.

** TK COMPUTERWARE of Ashford in Kent are sending prepaid Z88 Users' Club Membership Packs out to the States. TK will be supplying the packs with all Z88's it sells during a trial period, both here in England and through its associated company Sharps Inc of Mechanicsville, Virginia. Wordmongers have also had some Membership Packs, and hopefully other dealers will follow. TK Computerware are at Stone Street, North Stanford, Ashford, Kent TN25 6DF. Tel 0303 812801

** THE OFFICIAL CC modem has finally been shipped - as previously reported, it is a badged version of the 1200P, works at 300/300 and 1200/1200 baud, is fully Hayes-compatible, battery powered, and all this no bigger than a packet of cigarettes. It has auto-dialling using either pulse or tone dialling, and a built-in loudspeaker to allow call progress monitoring. When auto-answering a call, the modem will automatically select the correct matching speed and protocol. The modem is supplied with a version of Wordmongers Z-Term terminal software, and a subscription to Microlink. Cost is £149.95 + VAT. I hope to bring you a review of this 'official' modem in a future issue, as we are 'on the list' to borrow one for review.

** THE SPELLING checker from Computer Concepts mentioned last issue is looking on-time for its July launch date. A few more details have emerged about the product: The program can be used to check PipeDream files after completion, or it does come with its own text processor, simpler than PipeDream, which allows on-line checking of spelling; that is each word is checked as it is typed, and if the program thinks you have made a spelling error, it will beep to inform you, highlighting the word. If the program is released on time, there will be a review in the next issue.

** THE SHORTAGE of RAM chips seems to have eased a little this last few weeks - supplies of 128k cards are about, and the mythical 512k cards are also being delivered. CC hope to have fulfilled all outstanding orders for the 512k by the end of July. The problem now seems to have swapped to EPROM cards - software suppliers have had difficulty getting supplies of 32k EPROMs, which of course then means they cannot sell any programs....!

MEMBERS' LETTERS

Mike Crichton (0491)
Shifnal, Salop

Dear Roy,

I am not sure how I fit into the scheme of things so far as computing is concerned, I am 58 years old, don't know the first thing about BASIC or programming, and don't want to! I have had an Amstrad 6128 for 4 years, and bought the Z88 on impulse after reading an article in the new Computer Shopper mag, as it

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seemed to give me the portability I need in my job, and personal use.

So far I am delighted with the machine, and although some odd things have happened since I bought it three weeks ago, I have put them all down to my inexperience!

Finally, should you ever want some ramblings from the oldest NON Hacker in Town, let me know, after all there may well be other old idiots like me out there, we're not all whizz kids! (Perhaps you could run a section for the over 50's, and frustrated Fathers!)

(The beauty of computing is that it is a non physical pastime, suitable for all age groups and intellects. You really ought to try to grasp the basics (no pun intended) of BASIC programming - it really is quite interesting, and writing a program that works somehow gives you a feeling of superiority over your 'smart' computer. - Ed)

Ian Braby (0123)
Guildford

Dear Roy,

Z-Term

Further to the review of WordMongers' Z-Term in the last edition of Z88 EPROM, I thought I'd update it as there is a new version now available, namely v1.6.

In the review two particular omissions were noted, namely the inability to prepare mailboxes off-line and the lack of any facility to download from Prestel.

The first of these two has been dealt with in v1.6. As to the second - is that really a problem? The QL manages with a little BASIC program to translate the downloaded frames back into SuperBASIC or machine code, so perhaps there is some scope, there?

Reading the review I was struck by a rather odd feature of Z-Term in Viewdata-mode, namely that the "£" is used to produce "#". "What about home banking?", I thought. Well, I wasn't alone, and this has now been changed to the "DEL" key, instead.

These are not the only changes, but the others are more concerned with Hayes dial strings and a BREAK sequence. Further improvements are promised, but are going to be rather esoteric and aimed more at the US market.

In use, I can only echo the comments of the past reviewer - it is an excellent package. Prestel is very interesting in three screens(!) and the teletype mode is faultless.

I can even attest to the capabilities of the XModem downloading protocol, having used it to download Richard Russell's PATCH.BAS program from WordMongers' bulletin board's Z88 area.

SCRAZBLE

This is one of two games available from WordMongers. It comes on a 32K EPROM and is, effectively, free, the price being £19.95. However, the EPROM is full and responds to enquires as a ROM - so it's not as if you can have your EPROM and game, too!

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Like Z-Term, Scrazble appears on the applications list and is activated by G and it is a simple, but effective, version of the old arcade hit, Scramble.

There are lots of aliens to shoot and the fact that they are stationary on the horizontally scrolling mountain back-drop strikes one as a little disappointing at first. However, once you've battled along for a few minutes and your score hits 500, things starting moving quickly enough for you to be grateful that they aren't more complicated!

The UDG's are small but detailed, and the mountain terrain effective. Only one missile is permitted at a time, which adds to the difficulty and you'll soon be losing your five lives.

There is a single high-score entry, but this is not saved when you quit the game, but this is no great loss.

For a 'free' game it's very good value and I think it may be quite a while before I actually erase the EPROM!

P.S. A friend of Matthew Soar's (one of CC's resident engineers) has, apparently, written a CLI routine which gives you Filer-like access to the contents of an EPROM - i.e. no more calling each file in by name - highlight the required files from a menu and the routine does the rest! I mention this because I thought some publicity about it's existence might bring it forth into the public domain. I, for one, would appreciate it!

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(Since Ian wrote this letter, Z-Term has been further upgraded to V2.0. Improvements mean that the \diamond key no longer has to be held down, log-on strings A to D may be appended using an ampersand, and 7 bit Mark and 7 bit space parity are supported. - Ed)

D. W. Benison (0519)
Kinloss

Dear Sir,

Here are some comments on PC-Link:
After a period of use I find that the software is adequate for storing my data files etc. to disk to free memory on the Z88. The data transfers backwards and forwards o.k.

I did not come up against any major problem until I tried to translate some tabular data (text not spreadsheet) to and from WordStar and PipeDream format. I found that the data was no longer laid out as I had originally set it out, and there was a lot of editing to do to reformat the data neatly.

So far from being what I thought was a good package I now find it to be flawed in quite a serious way. I have not tried to use it with Lotus 1-2-3 as I do not use this package in my day to day work. Neither do I envisage using the Z88 in this way.

Apart from my gripes with the PC-Link now that the honeymoon is over I still think the Z88 is a wonderful little machine and a pleasure to use.

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John Gilbert (0409)
Fareham

Dear Roy,

My background is that I am a RN Engineer Officer now retired. I am 58 and fortunately still working, but not with computers except in my own time.

I have two Spectrums, Citizen 120D printer, Microdrives and a sometimes working disk drive. I can't stand games but write some training programs for the school where I work, only in BASIC though. I manage quite a lot of reading on computers in the magazines, but as yet cannot decide what other PC type to get.

If you can give me a Spectrum file saving routine it will save me a lot of money, as I cannot yet justify anything better on economic grounds. I have however just lost a great deal of valuable data, so must do something soon about separate backup.

I use my computers for the ease in writing letters, for genealogical databases and for the aforementioned animated teaching aids.

The Acorn range looks most promising for Z88 compatibility, but I'd like a PC clone for its probable wider flexibility.

So to end this preamble, good luck with the club, you are going to need it I think. I did have something to do with a safety magazine at one time and know that there is a good deal of work involved. Do you have a production team to help you?

Some comments arising from early newsletters:

External battery pack: Probably a good idea for safeguarding internal batteries but needs more thought. Ni-Cd battery pack has a much flatter characteristic, and will lose volts very

quickly when it goes. Maybe a pack with an LED indicator for warning of say 5.6 volts could be devised. Does the Bat Low give warning of external batteries? Of course not. Collect all you can on this and wait a bit longer before sanctioning a solution. We may need something like a six cell pack with a volts control chip and a LED for safety.

Page 6 Vol 1 No2 NO the centre of the coax plug is the positive.

Battery Warning - Faulty internal batteries:

I had a computer failure - nothing, followed by a hard reset losing some valuable files, with no battery warning, and I had quite recently changed batteries. What I found was that, even though the individual cells were up to voltage, when put in series there was poor contact between cells. I detected a contact area of either corrosion or erosion where the top of one cell touched the base of the next, leading to high resistance or open circuit. I have written to the battery manufacturers as a matter of some urgency.

Magazine contributions: While program listings are necessary on EPROM, I would like to suggest that letters alone might be sent in NLQ from our superb printers (if we have them). You could then cut and paste the letters into the magazine.

BASIC Handbook: I am not a BEEB man so I rather wanted the handbook on BBC BASIC as advertised inside the cover of our user guide. I have 'phoned M-Tec several times, but other than tell me that I am still on their computer, they say they still have not produced the book.

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This is a disgrace, please keep pressure on them. I have tried a listing from The micro User, and it worked, although I don't know why! Further thought: May I suggest that once a topic has been aired for a couple of issues that you open a file on the subject to keep further ideas, but only publish up to date editorial comment. Some subjects, like the battery holder, might be treated as a handbook supplement, and you could print a fact sheet. A list of these could be published annually and we could send a SAE and say 10p a sheet for copies.

(Your point on PC compatibility is even more relevant considering the new PC PipeDream. The Bat Low symbol does work with external batteries. Also the Z88 automatically shuts down when the voltage drops to a critical level. Disturbed to hear about your faulty batteries - we should all check the ends of a new set before replacement. While the idea of cut and paste to make up Z88 EPROM sounds o.k. in theory, there are two problems: 1 many people don't replace their printer ribbon often enough, resulting in grey print which won't copy well; and 2 it would make Z88 EPROM a mixture of all different typefaces which I think would spoil the appearance of the magazine. No, I don't have a team of helpers - this is a one-man band I'm afraid, with a lot of help from my brother and wife! I do like your idea of fact sheets - perhaps other members have thoughts on this one? -Ed)

QUERIES, HINTS AND TIPS

Keith Lawrenson (0157)

I wonder if there is a way to access data held in a PipeDream file while in BASIC. For instance it would be handy to be able to create a graph in BASIC using data from a spreadsheet. Has anyone found a way to SAVE calculated data from a PipeDream spreadsheet, rather than the expressions themselves?

(Richard Bignell's graph drawing program which works with the BASIC Patch will do what you suggest - Ed)

Ray Jones (0372)

In reply to Jim Cauldwell (0174) re the multifile document query in Vol 2 No 3. I had a similar problem and contacted CC. Their advice was that after typing in the last filename in the list it is essential not to press <RETURN>. Just save as Plain Text and Voila! it works. I have had no problems since. ◇FB works fine. Hope this helps.

Martin Gray (0562)

The following short CLI files change both the default device in the Panel and the device in the Filer from :RAM.1 to :RAM.0, and the second one back again.

```
|SV|~R~X0|[#S~D~D~D|~R~X0|[|
```

```
|SV|~R~X1|[#S~D~D~D|~R~X1|[|
```

These can be activated in the usual way by marking the appropriate one in the Filer and then keying ◇EX.

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Users of WordPerfect on the IBM PC and compatibles may not have discovered that there is a program called CONVERT.EXE on the Learning disk which allows conversion of files between WordPerfect and Wordstar formats. Thus a file can be converted from WordPerfect to Wordstar to PipeDream and vice versa (using the Wordstar conversion on the Z88 Import-Export disk.) Oddly, this utility is not mentioned in the WordPerfect manual, but in the booklet about installation and appendices. Complicated formatting commands get lost in both directions, but for reasonably plain text files this three-tier conversion is much better than trying to achieve the same using ASCII files.

Jim Armstrong (0361)

Have you received any complaints about the Dixons own brand of Centronics interface? I purchased one as Dixons do not stock the CC unit. Not only did it not work, but it drained a new set of alkaline batteries in five minutes flat. Dixons now have their interface, and I have my money back.

(Anyone else experienced similar problems?- Ed)

P.W. Thorne (0375)

A couple of hints about using printers:

You can easily create a 'pad' character by translating a little used character (such as \) into a space in your PrinterEd. This allows you to ensure that consecutive words or letters which you wish to appear together will not be split over two lines by formatting.

Although the PrinterEd allows you to use up to 8 highlight codes, you may sometimes need more in one piece of text, or you may want to use a special printer facility without having to

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bother to create, load and update your driver. If you define both the on and off string of one code (I use 3) as 27. This is the ESCAPE code and precedes most control codes on most printers. When used in text, the letter(s) immediately after this code are interpreted as control codes by the printer, even though they appear as letters on the screen. For example, using this system, \diamond PX4 will switch on italics, and \diamond PX5 will switch it off. It will upset text formatting, so insert your codes towards the end of text editing. This method allows great flexibility, and I have used it with View on the BBC Micro for some years. Does anyone have software to convert View files to PipeDream format and vice versa?

I also think I have found a bug in the Diary - If you create a set of annual dates to load in every year, loading at 1st Jan into a leap year makes every entry after 29th Feb a day out! I have overcome the problem by having my annual list run from 1st March to 28/9th Feb. (I don't really class this as a bug. Another way around the problem would be to load your Diary file into PipeDream, and insert or delete the entry for Feb 29th as required. - Ed)

HARDWARE REVIEW:

MIRACLE SYSTEMS Z88 V23 MODEM

The Miracle Z88 modem is a development from the modem that Miracle make for the Sinclair QL. It is physically very small, and offers auto-dialling if used with Wordmongers Z-Term, making the £50 price tag seem that much more of

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a bargain. The modem conforms to the V23 protocol - that is it transmits data at 75 baud, and receives at 1200 baud. These rates are fixed by the design of the modem, unlike some more exotic (ie. expensive) modems which support a number of different rates.

The modem is a small black box, about 7 by 5 by 2 cm, and apart from a silver label denoting the product's name, the only feature on the front face is a red light emitting diode to show when the modem is 'on-line'. There are two leads coming out of the case: On one side, a 3 metre cable terminated in a BT modular telephone jack, which will plug into the modern telephone sockets; on the opposite side a lead about 10cm long ending in a good quality 9 pin D plug to fit the Z88's RS232 port.

On the side of the modem is a BT socket, into which you may plug a telephone. On the rear of the unit is another silver label, showing the obligatory triangle symbol meaning the modem has not been approved for connection to the BT telephone system. Text on the label does however stress that the unit will not cause any damage in use.

There are two ways of using the modem, depending on whether or not you have the Z-Term terminal software. It is only with Z-Term that you can use the modem to autodial the service you require - so we will look at this option first.

Z-Term can be configured specifically for the Miracle modem. If you do this and then also store within Z-Term the telephone numbers of

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the services you wish to access, you may select the autodial option from the Z-Term menu, and the modem will dial the number and detect the carrier when present. Using this method I have successfully accessed Prestel and the Wordmongers PPS bulletin board.

If you have not bought the Z-Term software, use of the modem is a little less sophisticated: Without Z-Term, the modem goes on-line as soon as it is plugged into a switched-on Z88. As you can appreciate, this could cause problems, so the Miracle instructions give a step-by-step method to follow. This briefly means setting up the Z88 Panel to suit the service you want, selecting the Terminal, and then switching off the Z88, all with the modem unplugged.

You should now plug the modem into the Z88, and then using the telephone plugged into the modem, dial the service you require, and wait for the carrier tone. When you hear the carrier, turn on the Z88 and hey presto you will be on-line. The procedure sounds complicated when written down, but in practice you soon get used to it.

The Z88 Terminal software is a simple scrolling terminal emulation, so using the modem with this rules out access to Viewdata type services such as Prestel.

In conclusion, the Miracle Systems Z88 modem offers excellent facilities, subject to the limitations of the V23 protocol. Another point to bear in mind is that the autodial facility is only available when the modem is used in conjunction with the Wordmongers Z-Term

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terminal software. Bearing in mind the autodial capability of the modem, it would have been nice to have it include a small loudspeaker to allow call progress monitoring. This would no doubt increase the cost.

The one thing which lets the package down is the presentation of the documentation - about 60 lines of text printed on the side of the cardboard box, no bigger than 8 by 6 cm. The typeface is very small, and anyone with poor eyesight would not stand a chance. The instructions themselves are excellent - short, concise and clear - it is just the presentation which lets them down. Thankfully, once you are used to using the modem, the instructions can be discarded!

Generally, a modem which offers excellent value for money, seems well constructed, and is simple to use. The only restriction is that you are limited to 1200/75 baud.

Thanks to Miracle Systems for supplying the unit for review.

PRODUCT: MIRACLE SYSTEMS Z88 V23 MODEM

PRICE: £49.00

SUPPLIER: MIRACLE SYSTEMS
20 MOW BARTON
YATE
BRISTOL
BS17 5NF

Tel: 0904 423986

HARDWARE REVIEW -

BROTHER HR-5 THERMAL TRANSFER PRINTER

One of the main features of the Z88 is the element of portability - it allows you to compute where and when you want, rather than tying you to a mains power socket. While this works well for using the Z88, the problem arises if you wish to print out your work away from base - battery powered printers are both rare and expensive.

The Brother HR-5 is a portable printer which was originally sold in 1984. It is now effectively obsolete, but I considered the printer worthy of a review because of its suitability for use with the Z88, and the excellent value for money it offers at the moment.

The HR-5 is basically a thermal printer, powered by either 4 D-cell batteries or a mains adapter. One unusual feature is the fact that as well as using thermal paper for direct printing, it is possible to use plain paper with a special thermal transfer ribbon. The HR-5 comes supplied with one 30m roll of plain paper and three thermal transfer ribbons. Physically the printer is quite compact measuring approximately 30cm (wide), 17cm (deep) by 2.6cm (high), especially when you consider that it takes paper up to 8.5" wide. Weight without batteries is about 3lbs, batteries adding less than a pound to this figure.

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So even with batteries, the HR-5 plus the Z88 weigh only about 6lbs (under 3Kg) - not too bad to carry around in a briefcase.

The HR-5 comes equipped with a Centronics parallel interface as standard, so to use it with the Z88 you need a serial to parallel printer cable, such as the one sold by Cambridge Computer. The printer can be used with single sheets, or if the supplied roll holder is fitted, with rolls of paper up to 8.5' wide.

On the printer top panel are on-line and line feed buttons. Pressing the on-line button toggles the printer on and off-line, with a light next to the button indicating when the printer is on-line. Also on this front panel is an alarm LED, used to indicate when the printer has run out of ribbon or paper.

The only other control is an on/off switch on the left hand side of the printer, just above a coaxial socket for the mains adapter. The mains adapter for the HR-5 delivers 8.5 volts DC, and comes built into an over-sized mains plug.

The printer has a 9-pin thermal print head, forming the dot matrix characters in a variety of typestyles. For text, the printer is nominally Epson compatible, but will not print standard Epson graphics. By sending the correct control codes you are able to choose between Pica or Elite typestyles, with options available to give double-width, reduced, enlarged, emphasized and super- or sub-script characters, in a number of combinations.

Printing of normal characters is bi-directional and logic seeking. This latter term means that the carriage does not need to return to its left hand end position in instances where perhaps only a few characters are to be printed on the right hand side of the next line. The print head always takes the quickest route. Print speed is nominally 30 characters per second for normal characters.

As stated earlier, the HR-5 is unusual for a thermal printer in that it will print onto normal paper with a thermal transfer ribbon. The choice of print technique is simply governed by whether or not there is a thermal transfer ribbon installed in the printer. These ribbons are a cassette style, and the ribbon can be used once only. This means that after the printer has printed a line of characters, it then proceeds to wind one line-length of ribbon through the cassette.

The fact that each line of text uses a line of ribbon means that, although the ribbons are quite long, they do not last a particularly long time. Another factor to consider is the fact that with the ribbon, printing is slightly slower than using pure thermal paper, because of the time the printer takes to wind on the ribbon after every line.

In use the printer was quite pleasing. This page of the review was printed on the HR-5, and while the typeface cannot be described as 'near letter quality' by any means, it is clear and quite adequate for draft printing or printing on the move.

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Being a thermal printer, the HR-5 is very quiet in operation, especially compared to most normal dot-matrix printers. It also seems to give reasonable battery life from rechargeable cells. The printer is quite easy to set up to work with the Z88, and it comes with an excellent 50 page manual covering everything from dip-switch settings to trouble shooting.

With regard to the two available printing methods, I personally preferred using thermal paper rather than the thermal transfer ribbon. This was because to get good print quality from the thermal transfer ribbon, quite a shiny paper has to be used. Attempts to use normal paper with a rougher surface texture resulted in unsatisfactory print quality. This fact combined with the slightly quicker printing when using thermal paper made me favour this option.

In common with all thermal printers, because you have to use special paper the running costs are rather higher than the cost of using a conventional printer. From the same supplier as the printer, Two 30m rolls of plain paper cost £6.90 and two thermal transfer ribbons are £6.70. Of similar overall cost are two 30m rolls of thermal paper at £12.90. Paper should also be available from larger branches of WH Smiths and Boots - I bought a pack of 100 A4 sheets of Brother thermal paper from Smiths for £5.50.

In conclusion, the HR-5 offers good performance, portability, and reasonable print quality, even if the printing speed is a little slow.

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As you would expect from a manufacturer such as Brother, the quality of construction is excellent. Add to these the fact that the printer is available at such a silly price, and it surely is a must for anyone wanting a second printer, a portable printer, or people without a printer and a budget which previously ruled out buying one! The one minus point must be the running costs of this thermal printer - but unless you plan to print out reams of material this should not be a problem.

I am indebted to Stan Zawadski (0116) and David Prestage (0426) for bringing the HR-5 to my attention.

PRODUCT: BROTHER HR-5 THERMAL PRINTER

PRICE: £55.95 including carriage

SUPPLIER: UK HOME COMPUTERS LTD.
82 Churchward Avenue
Swindon
Wiltshire
SN2 1NH

Tel: 0793 695034

UPDATE ON WORDMONGERS' zBASE

At the recent ZX Microfair I got a copy of the Beta test version of Wordmongers new database for the Z88. Although I have only had a short time to use it, it looks a very promising product.

There are two levels at which it may be used:

Interactive commands: This is akin to typing BASIC commands at the cursor with no line number ie. the commands are interpreted and executed immediately. At this level zBASE can be used to keep a simple database. Adding records and looking for information can be quite easily achieved using commands which are a little obscure, but well explained in the manual.

The other, more advanced option is to prepare command files in PipeDream. This is similar in concept to writing a program in BASIC to be RUN later - it allows you to write command files which will carry out an often used sequence of commands. Another advantage of using this system is that there are commands which allow you to format the screen for both input and output - a carefully designed system would allow data input and data manipulation by inexperienced users.

Other commands allow data to be output in formats that are acceptable to other PC-based database software, such as dBase II, III & IV, word processors and spread sheets.

It would be unfair to review the Beta test version of zBASE, since the program is obviously going to evolve over the next few weeks as people find bugs and new features are implemented.

The first version of the finished program is expected by around August, price £69.00, so I hope to do a review of it in the September/October issue.

SOFTWARE PREVIEW: PC PIPEDREAM

Another piece of software received just before going to press with this issue was PipeDream for the IBM PC and compatibles.

Colton Software, who wrote PipeDream for the Z88, have produced both this version for the PC and a version for the Acorn Archimedes.

The exciting thing about the PC version (exciting for Z88 users who also have a PC, that is) is that if you couple to your PC using PC Link II, you can now use PipeDream on your PC and transfer files directly between the two programs - there should be none of the common problems often experienced with file transfer - such as loss of formatting with spreadsheets, or loss of printer control characters etc.

Apart from this major advantage, PC PipeDream also has a number of extra facilities compared to the Z88 version - among them a full mailmerge option, redefinition of the keyboard, macro files, and a full set of financial functions.

What I hope to be able to do (if I can get hold of a copy of PC Link II - the phantom EPROM shortage strikes AGAIN!) is to concentrate on the compatibility of the the PC and Z88 versions in the next issue, and then go on to look at the extra facilities the PC version has (such as the mailmerge) in the Sept/Oct issue. PC PipeDream costs £99+VAT, on either 5.25" or 3.5" disks.

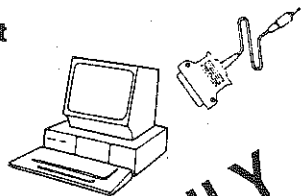
SEIKO WRIST TERMINAL

For IBMs & Compatibles (inc. Beltron)

If your database is on your desktop, keep the details in your SEIKO. Appointments, Price lists, Travel schedules, Key Notes.

Every little detail you cannot afford to forget, you can store in your Seiko

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PLUS £2.05 P&P

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(The Modem People)

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"PLEASE"

The complete menu-driven data management system for the IBM PC and compatibles

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82 Churchward Ave. Swindon, Wilts. SN2 1NH.

Tel:- (0793) 695034

PipeDream

PipeDream is now available for the IBM PC and compatibles, and the Acorn Archimedes. It has been completely rewritten for these computers and contains many new facilities, whilst retaining complete file and keyboard compatibility with the Z88.

PipeDream on the PC or Archimedes makes the ideal companion for your Z88. With just a connecting lead and the PC LINK II EPROM you can load files directly from the Z88 filing system into PipeDream on the other computer and continue working with no loss of information. Now you can use PipeDream on the computer in your home or office as well as using it in the Z88.

New features of PipeDream on the PC and Archimedes include:

- ◆ up to 8192 columns and over 500,000,000 rows (depending upon your computer's memory size)
- ◆ mail-merge
- ◆ function keys
- ◆ complete keyboard reprogrammability
- ◆ foreign character editing and printing
- ◆ linking files
- ◆ financial functions
- ◆ database functions
- ◆ LOTUS file load and save
- ◆ user defined colour displays

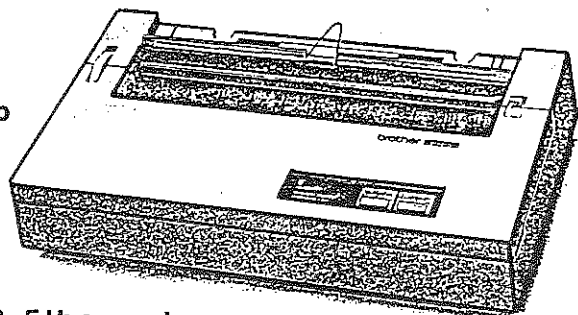
PipeDream for the IBM PC and PipeDream for the Acorn Archimedes costs £99 + VAT.

For more information or to order PipeDream call us on 0954 211472 or write to us at Colton Software, Broadway House, 149-151 St Neots Road, Cambridge CB3 7QJ. Access and VISA telephone orders welcome.

PipeDream - power at your fingertips

☆☆ BROTHER HR5 PRINTER ☆☆

"The perfect partner for your Z88"



A compact 9 Pin Thermal transfer printer of superb quality. Fully Epson compatible and operates at 30 CPS. Weighs only 3.5lbs and runs off batteries or mains. Comes complete with Standard Centronics Interface and Power Supply. Fully inclusive price of just.....

£55.95 (IMMEDIATE DELIVERY)

We also supply Interfaces and Cables for Z88 Computers to Centronics Printers. ACCESS ORDERS WELCOME

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82 Churchward Avenue,
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Tel: (0793) 695034

Wordmongers Ltd.

21 Edison Rd., Rabans Lane, Aylesbury, Bucks. HP19 3TE

Tel.(0296) 437878. Prestel 029634822. Telecom Gold 84:WOT001

Wordmongers' PPS Phone Post System.

This system is a private electronic mail system that sends a message, a complete file or even a picture via the telephone lines anywhere in the world. It uses standard micro-computers and MODEMS plus our economically priced PPS software.

- PPS Base (IBM or Apricot) £99.50
PPS Terminal software —
IBM/Apricot £49.99
PPS Terminal software —
Cambridge Z88 £49.99

Wordmongers' TX file transfer system.

File transfer is about sending a copy of a file, in its entirety, from one micro to another. The Wordmongers' TX package is now available for over 100 different micros including most popular CP/M and MSDOS machines as well as PC compatibles and the Sinclair QL.

TX has been in use for over 5 years.

TX is supplied for the pair of machines required. This pack contains the disk or cartridge for each of the pair to be linked, a manual and a cable.

A TX pack for a pair of machines, one of which is the Z88, is £99.50

Wordmongers software is licensed not sold. The full details of the software licence are available upon request from Wordmongers Ltd.

Prices are valid from April 1988 and include VAT at 15%. Postage and packing must be added to the amount you send at the rate of £2.00 for letter or parcel post.

Access and Barclaycard accepted.

MODEMS

Acoustic couplers

- 1200/75 version £49.99
300/300 £138.00

Direct connect MODEMS

Worldport 1200 is a new small Hayes compatible pocket MODEM £172.50

The Answercall MODEM is a 300/300 direct connect MODEM . . £69.95

Miracle Systems Autodialling 1275 MODEM inc. cable £49.99

WS4000 is a Hayes compatible desktop MODEM which can be supplied in a variety of formats from 300/300 to 1200/1200.
i.e. WS4000 V22 £479.00

MODEM cable (if required) £9.99

Games

32K EPROMs — Normal price and we throw in a game. When you are bored with the game, use it as a normal EPROM. £19.95

Or as a real challenge, The Withered Toad Adventure game. . £24.95

Terminal Software

Z-term — General purpose with X-MODEM and user defined function keys.

P-term — Wordmongers' PPS terminal.

G-term — Telecom Gold terminal.

M-term — Mercury 7500 terminal.

All terminals cost £49.99

zBASE is a productivity tool based on the concept of the interactive or command file driven relational database.

zBASE is a programming language which gives you the flexibility to handle your data in your own way.

You can easily create an information system that does exactly what you need.

Screens can be designed to allow quick and easy data entry by users who are not computer literate.

Interactive Commands

Because zBASE has a fully interactive mode, no programming skills are necessary.

Between them, zBASE and PipeDream provide virtually all of the functions a user will need to manipulate his or her data. zBASE supports commands to allow information interchange between the two programs.

A further option provides output files in a form acceptable to many large PC systems such as dBASE II, III and IV, word processor data files and spread sheets.

Command files

For more advanced programmers, or people who want to exploit the full potential of zBASE, a full command file processor will run command files written using PipeDream.

full screen addressing allows formatted input/output, and the Z88's own CLI redirection system allows for output to printers or a data file.

Complete data manipulation suites can be written by programmers for use by inexperienced users. Such users can carry out the most complex operations with just one command: DO PROGRAM

Users of dBASE II will find zBASE strangely familiar.

Wordmongers Ltd., Unit 21, Edison Road, Aylesbury, Bucks. HP19 3TE

Software developers wishing to sell zBASE application programs will be able to participate in a developers scheme under which they will be able to supply run time versions of zBASE to accompany their code. Included in the developers kit is a routine to encode the command files and provide a degree of protection against copyright infringement.

zBASE is available in August 88 at a price of £69.00 inc VAT.

Available from Wordmongers Limited or Z88 dealers.

For a limited period only, the 10% discount offered by Wordmongers on its other software will be available to Z88 Users' Club members on zBASE.

For programmers and others, here is a list of the commands supported by zBASE:

```
*
? exp
&indirect variable (macro)
AT SAY exp
AT GET var
APPEND BLANK
APPEND FROM file PD DELIMITED
                                FOR cond
CLS
CONTINUE
COPY TO file PD DELIMITED
CREATE file1 FROM file1
DELETE RECORD
DELETE FILE file
DISPLAY FOR cond FIELDS
DO command
DO WHILE/ ENDDO
GO exp / TOP / GO BOTTOM
IF / ENDIF
LET var=exp
LIST
LOCATE
QUIT
RECALL RECORD
RENAME file1 TO file2
RETURN
SELECT P/S
SKIP exp
USE filename
WAIT
```

Tel: Aylesbury (0296) 437878
Microlink/Dialcom 84:WOT001

SOFTWARE LIBRARY UPDATE

More programs, plus a new system where each program is identified by a reference number. For ease of ordering and lack of confusion, please quote **both** the number and title of the programs you want.

The numbers to the right of each program are the file lengths in k, so please make sure you have at least this amount of space available on EPROMs before sending them. You may send EPROMs that need erasing, but please make this clear and include the 50p erasure fee.

Also don't forget to send a return label and postage with your EPROMs. Please don't send EPROMs in an ordinary envelope - several have already been lost in the post, with me just receiving an empty envelope!

Z001 QL Transfer by Phil Borman (0143)
(Only available on blank QL microdrive)

Three programs by David Hambly (0173) which were previously printed in Z88 EPROM:

Z002 Think of a Number (1k)

Z003 Three Card Monte (1k)

Z004 21 Letter Trick (1k)

Z005 Password by Phil Borman (0143) (1k)
A short program for data encryption.

Z006 Change by Semaphore Logiciels (3k)
A currency exchange program in French.

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Z007 BASIC Patch by Richard Russell (0365)
(25k) inc. documentation & demos.
Implements a line editor and graphics.
Now updated to include Epson screen dump.

Z008 Filerfax by Jeremy White (0571) (4k)
BASIC database, including demo file.

Z009 Life by James Vernon (0470) (2k)
The classic on a 7x20 screen.

Four programs by Jim Armstrong (0361):

Z010 Calendar (4k)
Will calculate calendar for any year.

Z011 Hexdump (1k)
Gives a hexadecimal dump of any file.

Z012 Labels (1k)
Produces a list of all DEF FN & DEFPROC
lines in a BASIC program.

Z013 Calculator (2k)
Full function, multi register scientific
calculator.

Two spreadsheet applications by Steve
Butterworth (0385):

Z014 Fuel (26k) Works out your car's fuel
consumption. Calculates the total miles,
gallons, cost & litres plus mpg and
litres/100 Km. Two versions of the
program, one for miles and one for Km
input.

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- 2015 Currency converter (6k)
Will change the pound to seven other major currencies and vice-versa.
- 2016 Graph Pack by Richard Bignell (20k)
This is a suite of programs for use with the BASIC Patch to draw graphs. Data may be extracted from a PipeDream spreadsheet or read in from BASIC. With example files and documentation.
Includes BASIC Patch with screen dump.

SMALL ADS

**** FOR SALE ****

PC PUBLIC DOMAIN SOFTWARE (PC WRITE) TO CONVERT WORDSTAR FILES (CONVERTED FROM PIPEDREAM FILES) INTO ASCII TEXT FOR YOUR WORD PROCESSOR ON IBM AND COMPATIBLE PCS. SEND £1.00 TO COVER DISK AND POSTAGE TO: MICHAEL C. BROWNING, 7, BLACKFORD HILL GROVE, EDINBURGH, EH9 3HA.

**** FOR SALE ****

Z88 CASE AS NEW, UNUSED, STILL IN WRAPPER. £7 ALSO 32K RAM SWAP FOR 32K EPROM. GARY GROMB, 2 CARLYLE CLOSE, LONDON. N2 0QU

**** FOR SALE ****

32K RAM AS NEW - OFFERS INVITED OR EXCHANGE FOR 32K EPROM. TERRY FILBY, TEL 0502 715989.

**** CONTACT ****

ANY OTHER Z88 USERS IN SHEFFIELD AREA. PLEASE CONTACT ADI, 4 ELMORE ROAD, SHEFFIELD, S10 1BY. TELEPHONE (0742) 661278 FLAT 6

**** NEXT ISSUE OUT MID SEPTEMBER ****
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